

## PATENT ABSTRACTS OF JAPAN

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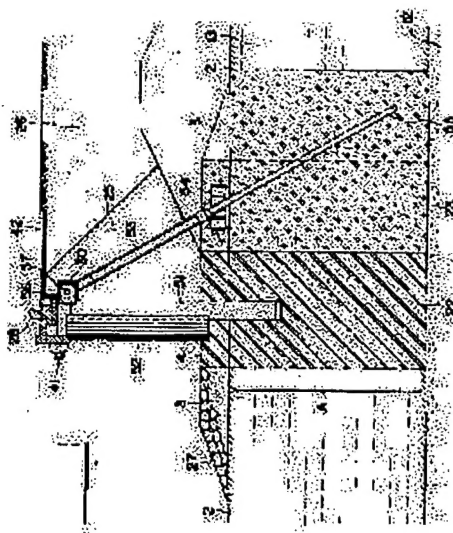
### (54) HARBOR STRUCTURE SUCH AS QUAY WALL ON A CEMENT BLENDED FOUNDATION AND CONSTRUCTION METHOD THEREOF

(57)Abstract:

PURPOSE: To eliminate waste from both the lower structure and the upper structure structural-dynamically by a method wherein a half cellular steel structural material is entirely, directly connected to a soil cement retaining wall to form an one body structure.

CONSTITUTION: Laying sand 3 is laid evenly on the sea bottom 2. Next, a hardened soil cement column body A is molded in the sea bottom by means of a disposing ship. Multi-king posts 51 are erected into this soil cement column body by means of a pile hammering ship. And further, for the cement column body A, a skew rope steel material 53 is fitted to a king post hanger 56 with a hinge. At this time, a skew rope steel tube pile 55 of the lower skew rope extension part has been already positioned through the taper hole of a skew rope steel material bed plate 54. Two skew rope tube piles 55 are hammered by means of a pile hammering ship to complete a series of the skew rope steel material laying operation. On the other hand, on land, a tentative

assembly of a flat steel plate 52 is performed and it is lowered into the laying channel excavated in a solid wall body 22, and further, it is filled with under water concrete, and then, the root part of a flat steel sheet pile is fixed sufficiently in the wall body 22 to finish the construction of the principal part.



## LEGAL STATUS

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